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ABSTRACT

Attachment and separation are concepts that depict the struggle within individuals between isolated self and involvement with others. Many authors have written about this struggle in a variety of terms. The theory evaluated by this study was elaborated by C. Gilligan (1982). It postulated that there existed two views of life experiences: one based on justice, rights, equality, reciprocity, separation, and individuation; and one based on connections, attachment, care, and relationships. These views were named "two modes of thought" but were related generally to men and women respectively. This thesis investigated Gilligan's postulates that men progress from a fear of intimacy (affiliation) to recognition of its importance while women accept affiliation initially and remain constant in valuing it across the life span. The Edwards Personal Preference Schedule was used to obtain self-reported values for affiliation and identity-strength. Subjects included 136 female and 69 male college students at a midwestern university, ranging in age from 21 to 54 years of age. The effect of affiliation strength was evaluated for age, gender, identity strength, and marital status. The results indicated a statistically significant interaction between age and gender for affiliation strength. This confirmed Gilligan's postulate that young men value affiliation less than young women. The results did not confirm the Gilligan postulates that women are constant in valuing affiliation over the life span, and that men become more affiliative with age. Instead, a significant decline was noted in affiliation for women between age groups 20-28 and 40-55 years. Unmarried subjects had higher affiliation strength scores than married subjects. (LLL)

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AFFILIATION RELATED TO AGE, GENDER, IDENTITY, AND MARITAL STATUS: A CONFIRMATORY STUDY OF C. GILLIGAN'S POSTULATE

being

A Thesis Presented to the Graduate Faculty
of Fort Hays State University in
Partial Fulfillment of the Requirement for
the Degree of Master of Science

by

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Abstract

The purpose of the researcher was to investigate C. Gilligan's postulates that men progress from a fear of intimacy (affiliation) to recognition of its importance, while women accept affiliation initially and remain constant in valuing it across the life span. The effect on affiliation strength of the following independent variables was evaluated: age, gender, identity strength, and marital status. The Edwards Personal Preference Schedule was used to obtain self-reported values for affiliation and identity strength (autonomy). The sample for this study consisted of 136 women and 69 men enrolled in a counseling appraisal class at a midwestern university. Ages ranged from 21 to 54 years. Fourteen comparisons plus 14 reoccurring comparisons were made employing three-way analysis of variance. Three of the fourteen comparisons were statistically significant. An additional nine comparisons were made employing Fisher protected *t*-tests. Of these nine comparisons, three were statistically significant.

The results of this study indicated a statistically significant interaction between age and gender for the dependent variable affiliation strength. Results from *t*-

tests revealed that women scored significantly higher on affiliation strength than men in the age groups 20-28 and 29-39 years. This was confirmatory of Gilligan's postulate that young men value affiliation less than young women. However, the results were disconfirmatory of the postulate that women are constant in valuing affiliation over the life span and that men become more affiliative with age. Instead, a significant decline was noted in affiliation for women between age group 20-28 years and 40-55 years. There was no significant difference among the affiliation scores of men from the three age groups. A comparison of affiliation in age group 40-55 years revealed no significant difference between men and women, a mid-life similarity postulated by Gilligan.

Two main effects on affiliation strength were statistically significant. One main effect was for the independent variable identity strength, and one was for the independent variable marital status. These were generated from a three-way analysis of variance in which identity strength, marital status and gender were the independent variables. Findings indicated that subjects who rated themselves highest in identity had significantly lower affiliation scores than those lowest in identity. Unmarried subjects had higher affiliation scores than married subjects.

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Introduction

Attachment and separation are concepts that depict the struggle within individuals between isolated self and involvement with others. Many authors have written about this struggle in a variety of terms. Libby and Whitehurst (1977) and VanHoose and Worth (1982), for example, made a distinction between two dimensions they called intimacy and autonomy. Gilligan (1982b) and Levinson (1978) defined attachment (or connectedness) versus separation. Traupmann, Eckels, and Hatfield (1981) similarly distinguished closeness and separateness while Rogers, Moore, Ryan, and Ollin (1982) spoke of interdependence versus independence. The struggle has been most often visualized as lying on a continuum between defining self (hereafter labeled Identity) and relating to others (Affiliation).

Erikson (1968) emphasized this struggle by declaring Intimacy (Affiliation) his sixth stage of psychosocial development, reaching its normative crisis in early adulthood after the major work of identity had been done. He postulated that intimacy ("true 'engagement' with others") was contingent upon "firm self-delineation" (p. 167). Other writers (Gilligan, 1982a; Lipman-Blumen & Leavitt, 1977; Straub, 1987; Josselson, Greenberger, &

McConochie, 1977) proposed that this developmental sequence was true mainly for men and that it may not accurately reflect female personality development. If it is shown that men and women have different developmental pathways to resolution of the identity-intimacy crisis or have different orientations to the attachment-isolation continuum, this could impact communication on many issues from value judgments to moral dilemmas and life choices.

Gilligan's Theory

The theory evaluated by this study was elaborated by Gilligan (1982a). It postulated that there existed two views of life experiences--one based on justice, rights, equality, reciprocity, separation, and individuation; and one based on connections, attachment, care, and relationships. These views were named "two modes of thought" but were related generally to men and women, respectively.

Early adult orientation. One of the postulates in Gilligan's theory was that young men had a "fear of intimacy" while the reality for women was a continuity of affiliation. In studies by Pollak and Gilligan (1982) using the Thematic Apperception Test, images of violence were more frequent in stories written by men in response to situations of affiliation while women did not project violence onto those scenes. Women's projections of

violence were described in situations of achievement where there was a danger of isolation, of being set apart and left alone. A replication study by Benton, Hernandez, Schmidt, Schmitz, Stone, and Weiner (1983) also indicated that violent imagery was linked more with affiliation than with achievement for men and that more men than women projected violence onto situations of affiliation.

Progression of orientation. Gilligan (1982a) further postulated that men's early adulthood orientation toward justice, rights and separation changed toward caring and attachment over the course of the life span. In 1971 Murphy and Gilligan (1980) administered the standard Kohlberg hypothetical moral judgment interview in written form to 56 Harvard-Radcliffe undergraduates, primarily sophomores, who had enrolled in a course on moral and political choice. Of the 26 subjects reinterviewed two and seven years later and used in the comparative study, only 5 were women so results predominantly concern men. Results were scored by an original and a revised Kohlberg scoring manual and also by a manual based on Perry's (1968) theory of intellectual and ethical development. Results reported by Murphy and Gilligan (1980) indicated that using Kohlberg's scoring system, of the 13 cases allowing the 7 year comparison, (all same form of Kohlberg dilemmas), 3 cases (male) regressed in development.

However, applying Perry's scoring with its different moral-judgment base (more relativistic, relational; see Appendices A and B), none showed regression. The same trend was noted on the 2 year comparison with Kohlberg's scoring consistently showing about 14% regression and Perry's markedly less, 0 - 4% depending on degree of stage change defined as regression. Murphy and Gilligan (1980) concluded that to explain progression in male adult moral development required a theory that allowed a progression toward commitment, as Perry's theory did.

In the fuller exposition of the Gilligan (1982a) theory, it was postulated that women remain continuously oriented to the care (versus justice) side of the dichotomy. The same level of research was not reported, only an elaboration of the concept that women progress from an absolute of care (not hurting others) through a recognition of need for personal integrity and on to changes in the understanding of relationships and the definition of care. The progression had woven through it a theme of continued value on affiliation for women. The author further stated that "the discovery now being celebrated by men in mid-life of the importance of intimacy, relationships and care is something women have known" (p. 17).

Other authors (Schiedel & Marcia, 1985; Mark & Alper, 1985; Prager, 1982; Hyman & Woog, 1987; Mellinger &

Erdwins, 1985) have not consistently confirmed or denied the concepts Gilligan postulated. The varied findings may have resulted from a narrow age range of subjects, from the nature of the instrument used, from additional confounding variables, or from a lack of gender comparisons.

Confirmatory Findings

Some early foundational work in the area of affiliation was conducted by Neugarten and Gutmann (1968) studying mid- to later-life transitions via fantasy. They found men became more accepting of their nurturant, affiliative nature as they aged. Gutmann (1964) found that as men moved from mid- to later-life they became more dependent, more people-oriented, and more allocentric. As women entered old age their assertiveness from middle-age continued but one focus of it, interpersonal/familial, was diminished. Hence, these findings were confirmatory concerning men but disconfirmatory concerning women.

May (1980) studied sex differences in projective imagination of 49 male and 60 female college students. He reported a "male pattern" of fantasy (labeled "Pride") which led from an initial fracture of connection followed by separation and on to irreparable loss. His theorized "female pattern" was labeled "Caring" and was described as deprivation followed by enhancement with connection maintained or restored. These terms and concepts were

similar to Gilligan's (1982a) models of Rights and Care.

Schiedel and Marcia (1985) studied 40 male and 40 female college students ages 18-24 years. They used semi-structured interviews to assign individuals to one of five intimacy (affiliation) statuses. They found more females in higher affiliation statuses than males ($X^2(1) = 4.27$, $p < .05$). The proportion of females in each affiliation status was fairly constant with age while the proportion of males in the higher affiliation statuses increased with increased age (females, tau - .049, ns, males, tau = .270, $p < .05$). This would seem to corroborate Gilligan's (1982a) model; however, the age range was too narrow to show much life span progression in the Schiedel and Marcia (1985) study.

Other studies of college-aged subjects which seemed to support the concept that women were more affiliative at the young adult age include Goebel and Lott (1986) who studied adoptees versus nonadoptees (mean age 25 years) and found females accomplished intimacy at an earlier age than males. Edgar (1983) found females more self-disclosive than men, and more disclosive to same sex friends. Men were less self-disclosive, usually disclosing to the opposite sex. Mark and Alper (1985) theorized that men learn disclosure behavior and expectations from women intimates and showed support for

this by their similar findings that men preferred to confide in women. The Mark and Alper study with 255 college students supported the postulates that affiliation is constant across age for women and that men experience increased affiliation with age, though the age difference between more and less disclosive men was only 6 months.

Prager (1982) studied the relationship among intimacy status, locus of control, and self-disclosure. Subjects were 97 college women, age 20-50 years with a mean of 30 years. She reported intimacy status did not vary with age.

Disconfirmatory Findings

Some studies of the progression of affiliation motive of women (without comparison to men) do not seem to support Gilligan's (1982a) postulate that women are consistently affiliative over the life span.

Hyman and Woog (1987) developed and administered a Life Priorities Q-Sort instrument to 92 women in a nursing program and separated them into two age groups, under-35 and over-35 years. Their findings indicated that the older women were more independent on measures of emotional needs, stability needs, and everyday living needs than the younger age group. They thus reported a decrease in affiliative strength with age.

Using a larger age range, Mellinger and Erdwins (1985) found that women over 60 years of age had a greater

need for affiliation and less concern for autonomy. Their subjects were 220 women divided into age groups 29-39 yeas, 40-55 years, and 60+ years. They subgrouped their subjects by marital, family, and career considerations and employed the Edwards Personal Preference Schedule scales of affiliation and autonomy. It is difficult to say whether the discrepant findings between these studies were due to age differences or to the subjective versus objective nature of the different instruments employed in these studies.

Findings diametrically opposite Gilligan's (1982a) postulate were reported in a study by Veroff, Reuman, and Feld (1984) involving men and women, age-grouped. Data used were from a representative national sample taken in 1957 (1363 subjects) and another comparable sample in 1976 (1208 subjects). Thematic apperception measures of motive were used. Findings included that women's affiliation motive declined across the adult life cycle while there was no change for men.

Other Variables

A further post hoc evaluation by Veroff, Reuman, and Feld (1984) of their data led to consideration of other confounding variables, many of which may be grouped as Identity or Marital Status. Veroff, et al. speculated that men were most often in higher prestige jobs than

women and identified strongly with their jobs. This orientation they suggested held the men's affiliation motive unchanged across the life span. To assess this hypothesis they controlled their data for job prestige using the Dictionary of Occupational Titles. Results indicated that women in high prestige jobs reacted similarly to men in general, i.e., no decline in affiliation motive with age. Further, men in low prestige jobs to which the authors assumed they were not as committed declined in affiliation motive with age, like women. No quantitative comparison of men's and women's affiliation was reported. The variable of job status was a confounding variable to the age-affiliation motive relationship. This could potentially be related to Identity.

A further finding in the Schiedel and Marcia (1985) study of 40 male and 40 female volunteers ages 18-24 years was that, for the overall sample, subjects high in identity were also high in affiliation ($X^2(1) = 13.87$, $p < .003$). This pattern held for males ($X^2(1) = 8.98$, $p < .01$) but was weaker for females ($X^2(1) = 3.64$, $p < .07$). This suggested that high affiliation was more contingent upon high identity for males than for females. The Gilligan (1982a) postulate of two different perspectives of identity/affiliation would seem to be supported.

Several other factors may influence affiliation

through their effect on identity and personal perception of self. Traupmann, Eckels, and Hatfield (1982) found that intimacy (affiliation) was a function of health and life satisfaction in older women (age 50-82 years). Bem (1975) found that independence (lower valuing of affiliation) was associated with masculine and androgynous individuals significantly more than with feminine individuals; however, this may be a function of identity strength since Orlofsky (1977) found that males and females who rated high in identity had higher masculinity scores on the Bem Sex Role Inventory than did their counterparts who were rated low in identity.

Marital status was reported as having a significant effect on affiliation motive by Orlofsky (1977), Prager (1982), and Hyman and Woog (1987). Orlofsky (1977) used presence and depth of an enduring relationship, specifically marital status, to actually define his intimacy statuses, thus assuming an important effect. Prager (1982) studied 97 junior and senior women in a suburban university. Intimacy status was evaluated by a 30-minute semi-structured interview adopted from the Orlofsky, Marcia, & Lesser (1973) original interview (which used marital status as a definition of intimacy status). This study found marital status correlated highly to intimacy level. However, a weakness of the

Prager (1982) study was that the dependent variable (marital status) was also used to define the independent variable (intimacy level); thus, a correlation was built into the study. Hyman and Woog (1987) used an evaluative instrument less related to the independent variable and still found a statistically significant relationship between marital status and interdependence, i.e. affiliation. They used a Life Priorities Q-Sort as mentioned earlier in this review and found that single women were more independent than married women. Married women were significantly more interdependent (affiliative).

Summary

The question then of the validity of Gilligan's (1982a) postulates that men develop to higher levels of affiliation with age whereas women are constant in affiliative strength may be seen to be effected by other than age-linked role shifts. The most widely reported variables that may additionally affect affiliation are marital status and identity level. These two variables may be age-linked and, hence, effect the age-gender relationship to affiliation strength.

Statement of the Problem

The purpose of the researcher was to investigate Gilligan's (1982a) postulate that men develop with age from a fear of intimacy (affiliation) to recognition of its

importance, while women accept affiliation initially and remain constant in valuing it across the life span. Following Gilligan's concept, the effect of age and gender on affiliation strength scores were evaluated. Identity level and marital status were expected also to influence affiliation strength scores so they were included in the study.

Importance of the Research

As life expectancy has increased and as a growing number of late 1940's post-war babies move through the developmental sequence into mid- and later-life, increased attention has been devoted to adult personality development theories. One theorist who has postulated that men and women, in general, follow different personality development pathways has been Carol Gilligan. Gilligan has been a prolific writer with 41 journal articles and reports, some in two languages, between 1970 and 1988. Her ideas have been replicated by some writers and often referenced at conferences and in collections of writings concerning relationships and maturation. However, Gilligan has been largely a philosopher, striking a responsive chord but teaming with various other colleagues for research corroboration of ideas. The research reported herein was an investigation of two of Gilligan's postulates as follows:

1. Men and women have different early adulthood orientations toward affiliation, i.e. men fear it and women value it, generally.
2. As men age, they come to value affiliation more while women remain constant in their orientation.

This research sought to confirm or disconfirm these postulates and thereby to add to the general knowledge accumulating concerning adult personality development theory. The following questions about affiliation strength were addressed:

1. Is there an association between age and affiliation strength?
2. Is gender associated with affiliation strength?
3. Is there an association between identity and affiliation strength?
4. Is marital status associated with affiliation strength?

Composite Null Hypotheses

The research was guided by the following hypotheses which were each tested at the .05 level of significance:

1. The differences among the scores from the Affiliation scale on the Edwards Personal Preference Schedule (EPPS) according to gender, age, and marital status will not be statistically significant.

2. The differences among the scores from the Affiliation scale on the EPPS according to age, marital status, and identity strength will not be statistically significant.

3. The differences among the scores from the Affiliation scale on the EPPS according to marital status, identity strength, and gender will not be statistically significant.

4. The differences among the scores from the Affiliation scale on the EPPS according to gender, age, and identity strength will not be statistically significant.

Definition of Variables

Independent variables were all self-reported.

Independent variables:

1. Gender - two levels
   a. Male
   b. Female
2. Age - three levels
   a. 20-28 years
   b. 29-39 years
   c. 40-55 years
3. Identity strength - three levels based on the subject's score on the Autonomy Scale of the EPPS (maximum possible equals 28 raw score points)
   a. 1-9 raw score points

b. 10-15 raw score points

c. 16-24 raw score points

4. Marital status - two levels

a. Single

b. Married

Dependent variable:

The dependent variable was affiliation strength as measured by the subject's score on the Affiliation scale of the EPPS.

Limitations

The following conditions may have affected the results of the research:

1. This research was an ex post facto study using data collected for another purpose. Subjects had completed the EPPS as part of a counseling class at a midwestern university. Some subjects attended the class at the main campus; others attended at one of two other locations 60-140 miles from the main campus. This was not a campus-wide sample. Affiliation scores for these subjects might have been influenced by their counseling-program bias. However, within the program, individuals had a wide variety of backgrounds and conventionality of interests, so it was not as homogeneous a group as might be expected.

2. Subjects had been assigned in the class to complete the EPPS and other test instruments and then to incorporate the results in a case study of themselves. Most completed the instrument outside the classroom so there existed in this study a lack of knowledge of conditions under which the instrument was marked.

3. Subjects were all from one geographic area of one state.

4. Subjects were not randomly selected.

Methodology

Setting and Subjects

The subjects for this study were 205 students enrolled in Appraisal of the Individual 834 at Fort Hays State University, some on the main campus at Hays and some in the outreach classes at Great Bend and Garden City, Kansas. Of the sample 69 were men and 136, women. Ages ranged from 21 to 54 years. Hays, Kansas is a midwestern town of 16,000 population, including the student population of about 5,000. Great Bend is 60 miles southeast of Hays (population also 16,000), and Garden City is 140 miles southwest of the Hays campus (population 18,000). All three of these towns are county seats and have hospitals, cultural activities, and some industry. The general area has established farming and oil interests. Garden City has a meat-packing industry.

Students in the survey were predominantly Kansas residents. Several commuted from an area with a radius of 60 miles of one of the class sites. Some summer students were from greater distances in Kansas and resided in Hays for the class period.

Instrument

The instrument used to measure affiliation strength and identity level of the individual subjects was the Edwards Personal Preference Schedule (EPPS). The EPPS consists of 225 forced-choice pairs of statements that profile 15 manifest psychological needs such as affiliation, autonomy, and dominance. The individual chooses one statement from the pair as more characteristic of himself/herself. Two pairs of items are given below:

A. I like to follow instructions and to do what is expected of me.

B. I like to have strong attachments to my friends.

A. I like to tell amusing stories and jokes at a party.

B. I like to write letters to my friends.

In the above items a choice of "B" in either case would indicate a disposition toward affiliation, although the individual needs addressed by this instrument are not independent of each other. All 15 of the personality subscales were scored. In the present study all analyses

were made from raw scores. Raw scores for the EPPS can be converted to percentile scores by using one of the four appropriate norm groups: college men, college women, adult men, or adult women.

Split-half reliability coefficients for 1509 students in the college normative group were presented by Edwards (1959). They range from .60 to .87, with a median of .78. He also reported test-retest stability coefficients with a one-week interval. These were based on a sample of 89 students and ranged from .55 to .87, with a median of .73.

The EPPS is a widely used personality inventory. It has been reported as an instrument used in other studies relating age, gender, affiliation, and/or autonomy (Erdwin & Mellinger, 1984; Mellinger & Erdwin, 1985; Orlofsky, Marcia, & Lesser, 1973; Abi-Karam & Love, 1984; Dixon & Hudson, 1982). As a result, using the EPPS permitted group assessment, comparisons to general normative population groups, and comparisons to earlier studies.

Design

This study utilized a post hoc status survey design. The design was factorial with the following independent variables investigated--age (three levels), gender (two levels), marital status (two levels), and identity level (post hoc grouped into three levels). A 2x3x2 factorial design was used to test hypothesis 1. Hypothesis 2 was

tested by a 3x2x3 design. A 2x3x2 factorial design was used to test hypothesis 3, and a 2x3x3 design was used for hypothesis 4.

Threats to internal validity (McMillan & Schumacher, 1984) were addressed as follows:

1. History--This threat did not apply because subjects were not tested twice.

2. Selection--To obtain adequate sample size subjects were not randomly assigned; instead, every subject who completed the full data set was included in the sample.

3. Statistical Regression--did not apply because subjects were not tested twice.

4. Testing--did not apply.

5. Instrumentation--The EPPS is a 225-item forced-choice instrument so fatigue and irritation toward the end of the testing could have been a threat to internal validity. Also, social desirability of some choices has been reported as a threat to validity with the EPPS. However, the subjects were students enrolled in a class to learn about test instruments so the majority would be expected to be cooperative in completing the instrument.

6. Mortality--Because this is an ex post facto status survey, mortality was not a threat to internal validity.

7. Maturation--did not apply due to status survey design.

8. Diffusion of treatment did not apply because no treatment was applied to subjects.

9. Experimenter bias--did not apply, no experiment.

10. Statistical conclusion--This study violated two assumptions of analysis of variance statistical procedures, those being random sampling and equal distribution within cells. Correction was made of the lack of equal distribution in cells by using a general linear model.

Several threats to external validity existed which could limit the degree to which these results could be generalized to other people and settings. They include the following:

1. Population external validity--Subjects were graduate students in the counseling program at a small midwestern university. Because of the nature of the variables, these results do not generalize to a much larger population.

The use of an instrument and age groups which were previously reported (Erdwins & Mellinger, 1984; Mellinger & Erdwins, 1985) allowed some comparison of these data to another sample population. This gave an indication of the population external validity.

2. Ecological external validity--Students completed these instruments outside the classroom so there was wide

variety in the testing environment. Data were collected over a twelve-year period (1977-1989) so there could have existed ecological threats to external validity based on social variables in that time frame--such as increased identification of women with traditional career pathway which is less affiliative or family-centered, decreased birth rates, and increased divorce rates.

Data Collecting Procedures

Scores on the Affiliation scale of the EPPS were collected to determine the affiliation strength of each of the subjects. These scores were obtained from EPPS instruments completed by the students as part of Appraisal of the Individual 834 in the Master of Science in Counseling program at Fort Hays State University. The completed instruments were security-stored in the office of the course instructor. Identities of the individuals were lost in the process of data collection.

Age data were obtained from the identification section on the EPPS. The Autonomy scale of the EPPS yielded scores which were post hoc grouped to yield the identity levels. Marital status of the subjects at the time the EPPS was completed was obtained from the instructor.

Research Procedure

The following were implemented:

1. A review of the literature in the areas of affiliation, fear of/capacity for intimacy, and autonomy,
2. An instrument was selected,
3. A research proposal was written, presented, and defended to the thesis committee,
4. Completed sets of file data were identified and data compiled,
5. Data were analyzed,
6. A copy of the thesis was compiled,
7. Thesis was defended to the committee, and
8. A final copy of the thesis was compiled.

Data Analysis

The independent variables investigated in this study were the following: age, gender, marital status, and identity level. The dependent variable for the study was affiliation strength. The following were compiled:

1. descriptive statistics for all data sets,
2. three-way analysis of variance (general linear model),
3. multiple comparison tests of means (Bonferroni *t*-test for means and Duncan's multiple range test for means), and
4. Fisher protected *t*-test.

Results

The purpose of the researcher was to investigate C. Gilligan's (1982a) theory that there exist two views of life experience, Justice and Caring, generally attributed to men and women, respectively. In particular the postulates investigated were that men progress from fear of intimacy (affiliation) to recognition of its' importance, while women accept affiliation initially and remain constant in valuing it across the life span. To evaluate these postulates the independent variables age (3 levels), gender (2 levels), marital status (2 levels), and identity strength (3 levels) were assessed in relation to the dependent variable affiliation strength. Four composite null hypotheses were tested at the .05 level of significance.

It was hypothesized in composite null hypothesis number 1 that the difference among the scores from the Affiliation scale on the Edwards Personal Preference Schedule (EPPS) according to gender, age, and marital status would not be statistically significant. Table 1 contains information pertaining to composite null hypothesis number 1. The following were cited in Table 1: variables, sample sizes, means, standard deviations, *F* values, and probability levels.

Table 1

A Composite of Mean Affiliation Strength Scores According to Gender, Age, and Marital Status Employing a Three-Way Analysis of Variance

Variable	n	M*	SD	F Value	P Level
Gender (A)					
Females	136	17.7	4.07	1.23	.2691
Male	69	16.0	4.68		
Age (B)					
20-28 years	102	17.8	4.08		
29-39 years	70	16.4	4.67	1.53	.2198
40-55 years	33	16.6	4.29		
Marital Status (C)					
Single	93	17.9	4.30	2.79	.0966
Married	112	16.5	4.32		
Interactions					
A X B				2.98	.0530
A X C				2.06	.1531
B X C				1.91	.1507
A X B X C				0.04	.8470

*Larger values indicated greater affiliation strength. Maximum possible score was 28.

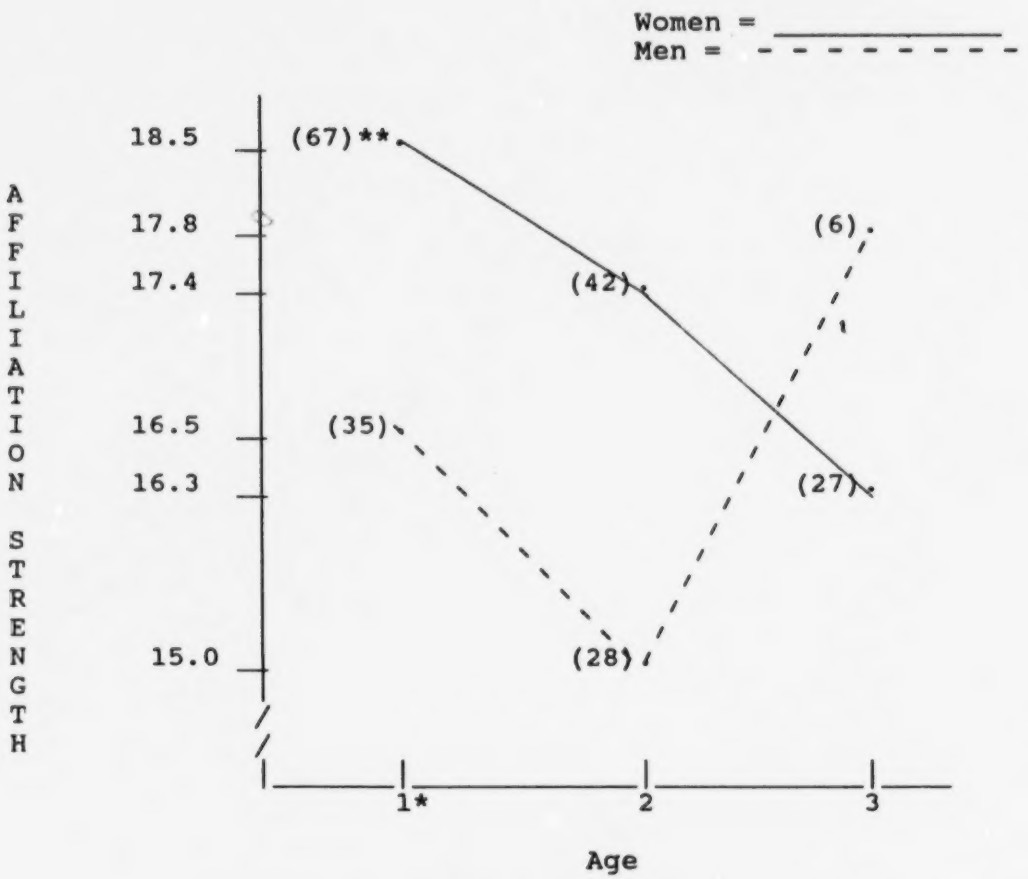
Since one of the seven p values was statistically significant at the .05 level, the null hypothesis

pertaining to this comparison was rejected. The significant comparison was for the interaction between gender and age. The results cited in Table 1 indicated no statistically significant main effects.

The interaction between gender and age was depicted in a profile plot. Figure 1 contains mean affiliation strength scale scores and curves for women and men.

Figure 1

Interaction Between Gender and Age Related to Affiliation Strength Mean Score



* 1 = 20-28 yrs, 2 = 29-39 yrs, 3 = 40-55 yrs.
** Sample sizes

The interaction between gender and age was disordinal. The results cited in Figure 1 indicated the following: the mean affiliation scale scores for women declined numerically with age at all points, and the mean

affiliation scale scores for men declined numerically between age group one (20-28 years) and age group two (29-39 years) and then increased between age group two and age group three (40-55 years).

The points on this profile plot depicting age and gender interaction were evaluated for statistical significance of differences using a two-tailed Fisher protected *t*-test at the .05 level. The following results were cited in Table 2: variables, sample sizes, mean affiliation, strength scores, calculated *t*-values, and critical *t*-values.

Table 2

A Comparison of Mean Affiliation Strength Scores According to Gender and Age Employing a Fisher Protected *t*-test

Variable	*n*	*M**	Calculated *t*	Critical *t*
Age				
20-28 years				
Females	67	18.5	2.275**	2.000
Males	35	16.5		
29-39 years				
Females	42	17.4	2.335**	2.000
Males	28	15.0		
40-55 years				
Females	27	16.3	.789	2.042
Males	6	17.8		
Gender				
Female				
20-28 years	67	18.5	1.327	2.000
29-39 years	42	17.4	1.059	2.000
40-55 years	27	16.3	2.292**	2.000
20-28 years	67	18.5		

(continued)

(Table 2 continued)

Variable	n	M*	Calculated t	Critical t
Male				
20-28 years	35	16.5		
			1.403	2.000
29-39 years	28	15.0		
			1.477	2.042
40-55 years	6	17.8		
			.698	2.042
20-28 years	35	16.5		

* Larger values indicated greater affiliation strength. Maximum value was 28.
** Statistically significant at the .05 level.

Statistically significant differences were found for three comparisons. Younger women (20-28 years) had higher affiliation strength scores than older women (40-55 years). In the age groups 20-28 years and 29-39 years women scored significantly higher on affiliation strength than men.

It was hypothesized in composite null hypothesis number 2 that the differences among the scores from the Affiliation scale on the EPPS according to age, marital status, and identity strength would not be statistically significant. Table 3 contains information pertaining to composite null hypothesis number 2. The following were cited in Table 3: variables, sample sizes, means, standard deviations, F values, and probability levels.

Table 3

A Comparison of Mean Affiliation Strength Scores According to Age, Marital Status, and Identity Strength Employing a Three-Way Analysis of Variance

Variable	n	M*	SD	F Value	P Level
Age (B)					
20-28 years	102	17.8	4.08		
29-39 years	70	16.4	4.67	1.75	.1772
40-55 years	33	16.6	4.29		
Marital Status (C)					
Single	93	17.9	4.20		
				2.61	.1076
Married	112	16.5	4.32		
Identity Strength (D)					
1-9**	51	18.3	4.22		
10-15	107	16.9	4.38	2.43	.0911
16-24	47	16.5	4.31		
Interactions					
B X C				0.55	.5785
B X D				1.23	.3012
C X D				0.60	.5510
B X C X D				0.62	.6003

* Larger values indicated greater affiliative strength. Maximum possible score was 28.

** Autonomy scale scores from EPPS. Larger values indicated greater identity strength. Maximum possible score was 28.

None of the seven p values was statistically significant at the .05 level; therefore, the null

hypotheses pertaining to the seven comparisons were retained. Results cited in Table 4 indicated no statistically significant comparisons.

It was hypothesized in composite null hypothesis number 3 that the differences among the scores from the Affiliation scale on the EPPS according to marital status, identify strength, and gender would not be statistically significant. Table 4 contains information pertaining to the composite null hypothesis number 3. The following were cited in Table 4: variables, sample sizes, means, standard deviations, F-values, and probability levels.

Table 4

A Comparison of Mean Affiliation Strength Scores by Marital Status, Identity Strength, and Gender Employing a Three-Way Analysis of Variance

Variable	n	M*	SD	F Value	P Level
Marital Status (C)					
Single	93	17.9[a]	4.30	10.73	.0012
Married	112	16.5[b]	4.32		
Identity Strength (D)					
1-9**	51	18.3[c]	4.22		
10-15	107	16.9	4.38	4.06	.0188
16-24	47	16.5[d]	4.31		
Gender (A)					
Female	136	17.7	4.07	1.31	.2538
Male	69	16.0	4.68		
Interactions					
A X C				2.93	.0887
A X D				0.19	.8285
C X D				1.74	.1783
A X C X D				1.61	.2020

* Larger values indicated greater affiliative statements strength. Maximum possible score was 28.

** Autonomy scale scores from EPPS. Larger values indicated greater identity strength. Maximum score was 28.

ab Difference statistically significant at the .05 level according to Bonferroni (Dunn) t-test for means.

cd Difference statistically significant at the .05 level according to Duncan's multiple comparison test for means.

Two of the seven p values were statistically significant at the .05 level; therefore, the null hypotheses for these two comparisons were rejected. Identity strength and marital status were the statistically significant main effects. None of the interactions was statistically significant at the .05 level. The results cited in Table 4 indicated that individuals with highest identity strength scores had significantly lower scores for affiliation strength than individuals with lowest identity scores. Single individuals had significantly higher affiliation strength scores than married individuals.

It was hypothesized in composite null hypothesis number 4 that the differences among the scores from the Affiliation scale on the EPPS according to gender, age, and identity strength would not be statistically significant. Table 5 contains information pertaining to composite null hypothesis number 4. The following were cited in Table 5: variables, sample sizes, means, standard deviations, F values, and probability levels.

Table 5

A Comparison of Mean Affiliation Strength Scores According to Gender, Age, and Identity Strength Employing a Three-Way Analysis of Variance

Variable	n	M	SD	F Value	P Level
Gender (A)					
Female	136	17.7	4.07	1.72	.1912
Male	69	16.0	4.68		
Age (B)					
20-28 years	102	17.8	4.08		
29-39 years	70	16.4	4.67	2.44	.0899
40-55 years	33	16.6	4.29		
Identity strength (D)					
1-9**	51	18.3	4.21		
10-15	107	16.9	4.38	1.26	.2860
16-24	47	16.5	4.31		
Interactions					
A X B				1.21	.2996
A X D				0.39	.6806
B X D				1.74	.1430
A X B X D				0.44	.7762

* Larger values indicated greater affiliative strength. Maximum possible score was 28.

** Autonomy Scale score EPPS. Larger values indicated greater identity identity strength. Maximum score was 28.

None of the seven p values was statistically significant at the .05 level; therefore, null hypotheses pertaining to the seven comparisons were retained.

Results cited in Table 5 indicated no statistically significant comparisons.

Discussion

The purpose of the researcher was to investigate C. Gilligan's (1982a) postulates that men progress from a fear of intimacy (affiliation) to recognition of its importance while women accept affiliation initially and remain constant in valuing it across the life span. The effect of affiliation strength of the following independent variables was evaluated: age, gender, identity strength, and marital status. The Edwards Personal Preference Schedule was used to obtain self-reported values for affiliation and identity-strength. Fourteen comparisons plus 14 reoccurring comparisons were made employing three-way analysis of variance. Three of the fourteen comparisons were statistically significant. An additional nine comparisons were made employing Fisher protected *t*-tests. Of these nine comparisons, three were statistically significant.

The results of this study indicated a statistically significant interaction between age and gender for the dependent variable affiliation strength. Results from *t*-tests revealed that women scored significantly higher on affiliation strength than men in the age groups 20-28 years and 29-39 years. This was confirmatory of

Gilligan's postulate that young men value affiliation less than young women. However, the results were disconfirmatory of the Gilligan postulates that women are constant in valuing affiliation over the life span and that men become more affiliative with age. Instead, a significant decline was noted in affiliation for women between age group 20-28 years and 40-55 years. There was no significant difference among the affiliation scores of men from the three age groups. A comparison of affiliation in age group 40-55 years revealed no significant difference between men and women, a mid-life similarity postulated by Gilligan.

In the present study a main effect of identity strength on affiliation was generated from a three-way analysis of variance in which identity strength, marital status and gender were employed. Findings indicated that subjects who rated themselves highest in identity strength had significantly lower affiliation strength scores than those lowest in identity. This was not consistent with a report by Schiedel and Marcia (1985) that subjects (ages 18-24 years) who were high in identity were high in affiliation. Their subjects were, however, assigned identity and affiliation statuses by an interviewer whereas in the present research individuals marked a self-reporting inventory. Inventoried identity and affiliation

may generate a more valid representation of Gilligan's concept (1982a).

Results of the present study indicated that marital status effected affiliation strength when evaluated with identity strength and gender. Unmarried subjects had higher affiliation strength scores than married subjects. This finding differed from the Hyman and Woog (1987), Erdwin and Mellinger (1984), or Mellinger and Erdwin (1985) research results pertaining to women only. The present study included single men and women as a group compared to married men and women and yielded results that indicated single individuals described themselves as more affiliative than married individuals.

In summary, the results of the present study were confirmatory of the following two Gilligan (1982a) postulates:

1. Young women were significantly more affiliative than young men.
2. For ages 40-55 years there was no significant difference in affiliation strength for men and women.

Results were disconfirmatory of two Gilligan postulates by indicating that

3. Women declined in affiliation strength between age group 20-28 years and age group 40-55 years.

4. Affiliation strength was not significantly different for men according to the age groups evaluated.

The independent variables in the present study were classification variables which provide documentation for association only. However, the results did appear to have limited utility in extending knowledge of adult personality theory.

Recommendations for further investigation of this topic were as follows:

(1) The study should be replicated using a variety of identified life roles of subjects, not just students.

(2) The study should be replicated with age levels extended beyond age 55 years.

(3) The study should be replicated with additional levels to classify marital status to include divorced, divorced remarried, and other long-term relationships.

(4) The study should be replicated as a repeated-measures versus classification study.

(5) The study should be replicated using a variety of geographic areas, including both rural and metropolitan areas.

The results of the present study appeared to have implications for expanding knowledge of adult personality development. Men and women did appear to have some

differences in comparative affiliation strengths at different points in the life span. Young women were more affiliative than young men. By middle age this difference was not indicated to be significant. This could have implications for career and personal counseling.

A second implication of these findings involved identity strength and marital status. Men and women who described themselves as highest in identity strength viewed themselves as less affiliative. This finding could have implications for social institutions. If, as more adults have careers and stronger identities, their affiliation strength decreases, this could mean decreased long-term relationships. This might be balanced somewhat by the finding that single individuals described themselves as more affiliative than married subjects did.

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Appendix A

Perry's Developmental Positions*

Position 1: The student sees the world in polar terms of we-right-good vs. other-wrong-bad. Right Answers for everything exist in the Absolute, known to Authority whose role is to mediate (teach) them. Knowledge and goodness are perceived as quantitative accretions of discrete rightnesses to be collected by hard work and obedience (paradigm: a spelling test).

Position 2: The student perceives diversity of opinion, and uncertainty, and accounts for them as unwarranted confusion in poorly qualified Authorities or as mere exercises set by Authority so we can learn to find The Answer for ourselves'.

Position 3: The student accepts diversity and uncertainty as legitimate but still temporary in areas where Authority "hasn't found The Answer yet". He supposes Authority grades him in these areas on 'good expression' but remains puzzled as to standards.

Position 4: (a) The student perceives legitimate uncertainty (and therefore diversity of opinion) to be extensive and raises it to the status of an unstructured epistemological realm of its own in which 'anyone has a right to his own opinion', a realm which he sets over against Authority's realm where right-wrong still prevails, or (b) the student discovers qualitative contextual relativistic reasoning as a special case of 'what They want' within Authority's realm.

Position 5: The student perceives all knowledge and values (including authority's) as contextual and relativistic and subordinates dualistic right-wrong functions to the status of a special case, in context.

Position 6: The student apprehends the necessity of orienting himself in a relativistic world through some form of personal Commitment (as distinct from unquestioned or unconsidered commitment to simple belief in certainty).

Position 7: The student makes an initial Commitment in some area.

Position 8: The student experiences the implications of Commitment and explores the subjective and stylistic issues of responsibility.

Position 9: The student experiences the affirmation of identity among multiple responsibilities and realizes Commitment as an ongoing, unfolding activity through which he express his life style.

*The complete description of these position can be found in Perry (1968, pp. 57-200). This abbreviated outline of the positions was taken from pp. 9-10 of that volume.

Appendix B

Kohlberg's Developmental Stages (1969)*

Premoral Level--Values simply reflect external pressure and dominant motives--are as follows:
Stage 1 -- to avoid punishment,
Stage 2 -- to serve individual's own needs and interests.

Conventional Level--Values is placed in maintaining the conventional social order and the expectations of others. Dominant motives are:
Stage 3 -- to be a good person in your own (and other's) eyes,
Stage 4 -- to avoid breakdowns in the social system.

Principled Level--Value resides in principles and standards that can be shared. Dominant motives are:
Stage 5 -- a sense of obligation to the social contract.
Stage 6 -- the belief in the validity of universal moral principles.

*As cited in Hoffman, L., Paris, S., Hall, E., & Schell, R. (1988). Developmental Psychology Today (5th ed.). (pp. 302-304). New York: Random House.